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| About this Lesson |
| In this lesson, students compare rates and calculate return on various investment vehicles. Students will develop skills with percentages and banking, as well as how to research. |

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| **Grade Level** | **Course(s)/subject(s)** | **Learning Goal(s)** | **Suggested**  **Timing** |
| 8 | Mathematics, grades 1-8 (2005) | At the end of this lesson, students will:   * develop their financial vocabulary * understand what is interest * identify the different vehicles available for saving money (e.g., types of bank accounts and other investment vehicles) | 40 minutes |

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| Curriculum Links |
| Mathematics, grades 1-8 (2005)  Number Sense and Numeration  Solve problems involving percentages expressed to one decimal place (e.g., 12.5%) and whole number percentages greater than 100 (e.g., 115%).  Solve problems involving per cents expressed to one decimal place (e.g., 12.5%) and whole-number per cents greater than 100 (e.g., 115%). (Sample problem: The total cost of an item with tax included [115%] is $23. Use base ten materials to determine the price before tax.) |

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| Inquiry Question |
| To what extent are students able to identify investment alternatives and calculate simple interest on these investments? |

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| Materials List |
| * Accounts and Investments Worksheet (Appendix A) * Calculator * Resources on different types of accounts (i.e., could be drawn from library, collected from various banking institutions or students could use computers with Internet access) |

| **Timing**  (Mins.) | **Lesson Sequence** | **Assessment for and as Learning Opportunities** (self/peer/teacher) |
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| MINDS ON | | |
| 5-10 minutes | WHOLE CLASS  Write the following statement on the board: “You work hard for your money. How can you make your money work for you?”   * Ask students to comment on what they think the statement above means. * Discuss the feedback from students and assess any prior knowledge they have about the concept of investing. Introduce students to some of the terms related to banking and investing that will be used in the first section of the handout (e.g., bank account, interest, lending, borrowing, rate, investment vehicle, banker, bank, investing, accumulation, etc.). * Write the terms on the board and ensure they are well spaced out. | Observations/notes |
|  | Context for Learning   * Students have had previous experience working with decimals and per cents. * Students are able to calculate the percentage of a particular number. * Students have some level of experience with savings accounts and have a general understanding of what it means to save. |  |

| **Timing**  (Mins.) | **Lesson Sequence** | **Assessment for and as Learning Opportunities** (self/peer/teacher) |
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| ACTION | | |
| 30 minutes | WHOLE CLASS  Visualization of How Interest Works  Introduce the topic of interest by drawing figures and/or images on the board to represent the investor, the banker or bank, and a sum of money.  (Technology alternative: Project on the board, use SMART notebook files to show images and figures)  By pointing to your images, explain the following:   * Money is not free to borrow. Most banks or individual lenders charge interest when they lend people money. * If you wish to borrow money, you must pay an additional fee to the bank or lender. * The fee that bankers charge is called “interest.” This is a percentage of the amount of money you have borrowed. (Show a simple example of how interest is calculated for the borrower – write this near the banker image you have drawn.) * Alternatively, if you lend your money to someone, you can earn money by charging interest to the borrower.   Demonstrate another example of how interest is calculated in relation to the lender and what they collect.  Hand out the worksheet (Appendix A) and explain that today’s activity will allow students to calculate how much money can be earned on various investments or bank accounts through the accumulation of interest.  Instruct students to individually complete Part I and Part II of the worksheet to compare different bank accounts. | Accounts and Investments Worksheet (Appendix A) |
|  | **WHOLE CLASS**  Provide students with computer and/or banking brochures and materials on the accounts mentioned. Once students have finished, ask for volunteers to share their findings for each account and definition by coming to the board and displaying their answers.  Review the additional terms on the next section of the handout together. |  |

| **Timing**  (Mins.) | **Lesson Sequence** | **Assessment for and as Learning Opportunities** (self/peer/teacher) |
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| ACTION (cont’d.) | | |
|  | Introduce the topic of calculating simple interest by sharing an example on the board (you may choose to add more examples): Example: You have $2,000 of your money in a bank account. The bank account pays a 2% interest rate per year. How much money will you have in your bank account after one year?  INDIVIDUALLY  Instruct students to individually complete Part III of the worksheet to determine bank account values given principal and interest rate.  (Note: The teacher should have reviewed/taught lessons on percentages and per cent/fraction equivalency.)  (As an extension, students could also be asked to use an electronic spreadsheet such as Microsoft Excel or Google Sheets to prove their answers.)  Note: Teachers should be aware that this lesson assumes simple interest on all accounts and investment vehicles. |  |
| CONSOLIDATION/DEBRIEF | | |
|  | WHOLE CLASS  Discuss with students the following questions:   1. As a student, what kind of accounts or investment vehicles would you be most likely to use? Why? 2. Why do you think the government offers GICs as a way of saving money? 3. Do you believe any of the account types you learned about today are not good places for a person to put their money? Explain your reasoning. 4. Have you heard the expression “time is money”? What do you think that means in relation to what you learned today and how are you at an advantage at your age when it comes to saving and investing? |  |

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| Saving and Investing Worksheet |
| With a partner, complete the following worksheet.  The worksheet will be discussed as a class at the end of the period.  Part I: Accounts and Investments  Using the Internet or the research material provided, find information on the accounts and investments in the list below. Include the full name of the account or investment and what it is usually used for.  Also, research “other information” that is relevant to the account or investment, such as:   * Any rates you may find for that kind of account and/or investment? * Any limitations/restrictions (i.e., how much money can I put in and when can I access it, how old must I be, etc.)? * Any fees you may be charged for using the account or investment? * Are they accounts you put money into, or something you purchase with your money? * Any risks?  |  |  |  | | --- | --- | --- | | Account or Investment | Description | Other Information | | Chequing account  C:\Users\Kris\AppData\Local\Microsoft\Windows\INetCache\Content.Word\checkbook-300px.png |  |  | | Savings account  C:\Users\Kris\AppData\Local\Microsoft\Windows\INetCache\Content.Word\coffre-fort-300px.png |  |  | |

**APPENDIX A**

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| Saving and Investing Worksheet (cont’d.) |
| |  |  |  | | --- | --- | --- | | Account or investment | Description | Other information | | Youth/student savings account  C:\Users\Kris\AppData\Local\Microsoft\Windows\INetCache\Content.Word\saving_up_pink_version-300px.png |  |  | | Government Bonds  C:\Users\Kris\AppData\Local\Microsoft\Windows\INetCache\Content.Word\Bond-300px.png |  |  | | Guaranteed Investment Certificate (GIC) |  |  | |

**APPENDIX A**

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| Saving and Investing Worksheet (cont’d.) |
| Part II: Terms What do the following terms mean?  1. Rate:  2. Interest:  3. Principal value:  4. Final value: |

**APPENDIX A**

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| Saving and Investing Worksheet (cont’d.) |
| Part III: Scenario  You have spent all summer working at a job. Thanks to all of your hard work, you earn $5,000 by the end of August! You are proud of the work you did and want to place your hard-earned cash in an account and/or investment (or combination) that you believe is best for you.  Calculate how much interest you would make in one year from each of the following accounts or investments by filling out the chart below. Conduct an Internet search to find a rate to use for the calculation in each savings instrument. Write the source of the information (e.g., Scotiabank, RBC, government site, etc.).   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Account or investment | Principal value | Rate (%)\* | Source | Interest | Final value | | Chequing account |  |  |  |  |  | | Savings account |  |  |  |  |  | | Youth/student savings account |  |  |  |  |  | | Canada Savings Bonds |  |  |  |  |  | | Guaranteed Investment Certificate (GIC) |  |  |  |  |  |   \*Assume simple interest   1. With this information, answer the following questions: A. Where would you save and/or invest your money? Calculate the total cash you will have after one year. 2. Why have you chosen the account(s)/investment(s) you stated in Question A. Justify your reasoning by explaining what attracted you to the account(s)/investment(s) you chose. |

**APPENDIX A**